REMARKS

Claims 1, 3, 5 and 9-12 are pending in this application. By this Amendment, claims 1 and 10 are amended, and claims 4 and 7 are made independent by canceling claims 4 and 7 and adding new claims 11 and 12. Claim 1 is amended to further distinguish over the references cited in the Office Action. Claim 10 is amended for antecedent basis.

No new matter is added to the application by this Amendment. Support for new claims 11 and 12 can be found in claims 1, 3, 4 and 7, as originally filed.

Entry of the amendments is proper under 37 CFR §1.116 because the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not raise any new issue requiring further search and/or consideration as the amendments amplify issues previously discussed throughout prosecution and make previous dependent claims 4 and 7 independent; (c) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (d) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because the amendments are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

I. Features of the Alloy Recited in Claim 1

The heat resistant magnesium casting alloy recited in amended claim 1 includes Al in an amount of over 6% and not more than 10%, Ca in an amount over 2% to 5%, and with a Ca/Al ratio of 0.3 to 0.5.

The present specification also sets forth that the inventors newly discovered that by limiting the ratio Ca/Al of the Ca content to the Al content to the range of 0.3 to 0.5, even if adding Al and Ca in amounts above 6% to 2%, respectively, it is possible to simultaneously achieve an improvement of the high temperature strength and castability, which are the main effects of high Al, and an improvement of the creep resistance, which is the main effect of

high Ca, without causing either a drop in the creep resistance due to the higher Al or casting cracks due to the higher Ca. See page 2, line 32 to page 3, line 6 of the present application.

None of the cited references, taken singly or in combination, teaches or suggests a heat resistant magnesium die casting alloy consisting of (1) an Al content over 6 wt.% to not more than 10 wt.%, (2) a Ca content over 2 wt.% to not more than 5 wt.%, and (3) a Ca/Al ratio of the Ca content to the Al content being 0.3 to 0.5, as well as further including (4) a Sr content over 0.05 wt.% to not more than 1.0 wt.%, a Mn content over 0.1 wt.% to not more than 0.6 wt.%, and a balance of the heat resistant magnesium die casting alloy is Mg and unavoidable impurities, as required by amended claim 1.

II. Rejections Under 35 U.S.C. §103(a)

For quick reference purposes, Tables A1-A9 herein are copies of tables from the cited references showing the alloy compositions of the disclosed examples and comparative examples from the cited references. In Tables A1-A9, alloys of the cited references having component elements in amounts within the ranges recited in claim 1 and that may appear to be relevant are marked with a star, and with data associated with alloys of the cited references that are outside the ranges recited in claim 1 being circled.

A. EP 0799901

Claims 1, 3, 5 and 9 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over EP 0799901 (EP '901). This rejection is respectfully traversed.

The Patent Office also alleges that EP '901 discloses the features including the claimed Mg based alloy composition and Ca/Al ratio. Applicants respectfully disagree.

EP '901 teaches that to obtain the desired effect of higher elongation, the amount of aluminum within the alloy should be limited to not exceed 6% by weight. See page 2, lines 55 and 56 of EP '901. However, the composition of claim 1 requires an Al content of over 6% by weight.

Additionally, all of the disclosed Examples in EP '901 have Al contents lower than the 6% by weight required in present claim 1 as shown below in Tables A1 and A2.

[Table 1]

		Chemical Composition (Wt.%)					
		Al	Ca	Si	Mn	Sr	Mg
Example 1	Mg-3Al-2Ca	2.98	2.05	0.30	0.25	-	Remainder
Example 2	Mg-4Al-2Ca	3.95	2.02	0.30	0.32	-	↑
Example 3	Mg-4Al-3Ca	4.02	3.06	0.29	0.28	-	↑
Example 4	Mg-5Al-3Ca	5.97	3.10	0.29	0.30	-	↑
Example 5	Mg-4Al-2Ca-0.03Sr	3.87	2.06	0.25	0.25	0.03	↑
Example 6	Mg-4Al-2Ca-0.09Sr	4.09	1.96	0.30	0.23	0.09	↑
Example 7	Mg-4Al-2Ca-0.15Sr	4.04	2.10	0.32	0.25	0.15	↑
Comparative Example 1	ASTM AS41 Equivalent	4.39	-	0.45	0.28	-	↑
Comparative Example 2	Mg-9Al-0.5Ca	8.70	0.48	0.30	0.21	-	↑
Comparative Example 3	ASTM AZ91D Equivalent	8.84	-	0.09	0.22	-	↑
Comparative Example 4	Mg-4Al-4Ca	4.02	3.96	0.32	0.32	-	↑
Comparative Example 5	Mg-9Al-3Ca	2.76	2.71	0.27	0.36	-	↑

Table A1

	Ca/Al weight ratio	Casting crack formed or not
Example 1	0.69	No
Example 2	0.51	No
Example 3	0.76	No
Example 4	0.52	No
Comparative Example 1	0.69	Yes
Comparative Example 5	0.98	Yes

Ca/Al
Ex. 5 0.53
Ex. 6 0.49
Ex. 7 0.52
Comp 2 0.01
Comp 3 -
Comp 4 0.49

Table A2

While Comparative Examples 2 and 3 in EP '901 have Al contents overlapping the Al content recited in claim 1, Comparative Example 3 does not contain Ca, required in an amount of over 2 wt.% to 5 wt.% and Comparative Example 2 contains Ca in an amount less than the claimed 2 % by weight Ca content and has a Ca/Al ratio that is outside the Ca/Al ratio range of 0.3 to 0.5 required in claim 1, as shown in Tables A1 and A2.

Moreover, the alloy of claim 1 is further distinguished from the alloy of EP '901 because the alloy recited in claim 1 excludes the presence of Si, which is an essential element in the alloy of EP '901 as shown in Tables A1-A2.

Table A1 corresponds to Table 1 of EP '901 and Table A2 corresponds to Table 3 of EP '901. As shown in Table A1, the Al content of Examples 1-7 and Comparative Examples 1, 4 and 5 in EP '901 is outside the required Al content range recited in claim 1. Additionally, Examples 1-7 and Comparative Examples 1-5 in EP '901 each include Si, which is excluded from the alloy composition of the present claims. Additionally, Comparative Examples 1-3 have Ca contents that are outside the required Ca content range recited in claim 1 (see Table A1). Moreover, as shown below in Table A2, Examples 1-5 and 7 and Comparative Examples 1, 2, 4 and 5 have Ca/Al ratios that are outside the required Ca/Al ratio range recited in claim 1.

Thus, EP '901 does not disclose any alloy composition satisfying all of the claim 1 requirements, including the ranges of the Al content, Ca content and Ca/Al ratio of claim 1. Because these features of independent claim 1 are not taught or suggested by EP '901, the teachings of EP '901 do not render the features of claim 1 obvious to one of ordinary skill in the art.

For at least these reasons, claims 1, 3, 5 and 9 are patentable over EP '901. Thus, reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) are respectfully requested.

B. Nussbaum et al., EP '531 or EP '743

Claims 1-3, 5 and 9 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,147,603 to Nussbaum et al., EP 1308531 (EP '531) or EP 1048743 (EP '743). This rejection is respectfully traversed.

1. Nussbaum et al.

The Patent Office alleges that Nussbaum et al. teaches or suggests each feature recited in claims 1, 2, 5, 8 and 9. Applicants disagree.

Contrary to the allegations by the Patent Office, Nussbaum et al. fails to teach or suggest (1) the recited Ca/Al ratio of the magnesium alloy of claim 1, and (2) an alloy satisfying the recited ranges for Ca content, Al content and Ca/Al ratio. The alloy of Nussbaum et al. that is based on magnesium with a load at rupture of at least 290 Mpa and an elongation at rupture of at least 5% does not teach or suggest the claimed composition recited in claim 1.

None of the disclosed Examples in Table 1 of Nussbaum et al. have both Ca and Al amounts within the recited ranges of claim 1 and the recited Ca/Al ratio of claim 1. As shown below in Table A3, the alloys disclosed in Nussbaum et al. fail to satisfy the required Al contents, Ca contents and Ca/Al ratios required in claim 1. Table A3 below corresponds to Table 1 in Nussbaum et al.

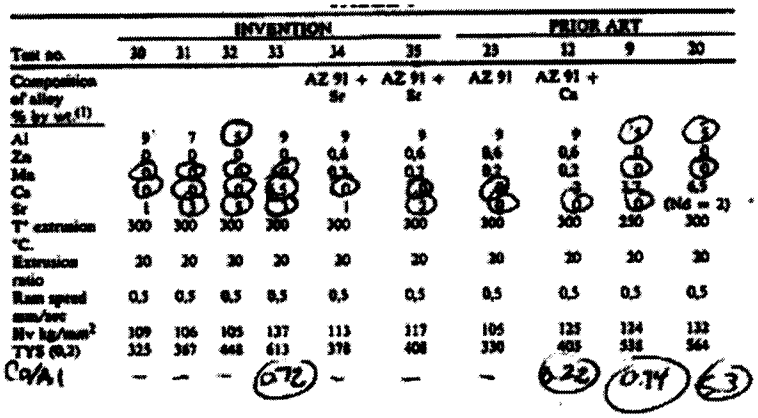

Table A3

Only Test nos. 9, 12 and 33 contain both Al and Ca. However, none of Test nos. 9, 12 and 33 of Nussbaum et al. have Ca and Al contents and a Ca/Al ratio within the recited ranges required in claim 1. Test no. 12 of Nussbaum et al. has Al and Ca contents overlapping the Al and Ca contents recited in claim 1, but Test no. 12 has a Ca/Al ratio outside the Ca/Al ratio range recited in claim 1. Test no. 12 is also different from the alloy of claim 1 because the former contains no Sr, required in the alloy of claim 1 in an amount over 0.05 wt.% to not

more than 1.0 wt.%, and contains Zn which is excluded from the alloy of amended claim 1. Thus, Nussbaum et al. does not teach or suggest the alloy consisting of the recited Ca amount, the recited Al amount and the recited Ca/Al ratio, as well as the inclusion of Sr and Mn in the recited amounts as required in the claim 1.

Because these features of independent claim 1 are not taught or suggested by Nussbaum et al., the teachings of Nussbaum et al. do not render the features of claim 1 obvious to one of ordinary skill in the art.

For at least these reasons, claims 1, 3, 5 and 9 are patentable over Nussbaum et al.

2. EP '531

The high strength magnesium-based alloys of EP '531, that are suitable for high temperature application, even at 175-200°C, fail to teach or suggest the claimed composition required in claim 1. The alloy composition of EP '531 contains 0.3 to 2.2% by weight of Sn as an indispensable alloying element for improving casting property of an alloy composition. See paragraph [0024] of EP '531 and Examples 1-14 in Table A4 shown below. Table A4 below corresponds to Table 2 of EP '531.

Alloy	Al %	Mn %	Zn %	Ca %	Sn %	Sr %	Si %	Fe %	Ni %	Cu %	Be %
Example 1	4.7	0.29	-	1.9	1.2	0.3	0.01	0.002	0.0006	0.0005	-
Example 2	5.3	0.31	0.3	1.8	0.3	-	0.01	0.002	0.0005	0.0006	0.0005
Example 3	5.1	0.30	-	2.9	1.0	-	0.01	0.003	0.0006	0.0006	-
Example 4	4.9	0.30	-	2.0	2.0	0.3	0.01	0.003	0.0005	0.0005	-
Example 5	5.2	0.31	-	3.1	0.9	-	0.01	0.002	0.0007	0.0004	0.0007
Example 6	6.1	0.29	0.6	2.2	2.0	-	0.01	0.002	0.0006	0.0006	-
Example 7	6.2	0.30	-	2.1	0.3	0.3	0.01	0.003	0.0006	0.0005	-
Example 8	6.2	0.28	-	2.8	1.2	-	0.01	0.003	0.0007	0.0005	-
Example 9	5.9	0.26	-	3.0	0.5	0.3	0.01	0.002	0.0005	0.0006	-
Example 10	6.6	0.25	-	1.9	1.5	0.5	0.01	0.003	0.0006	0.0005	-
Example 11	7.1	0.26	-	2.0	0.5	-	0.01	0.003	0.0006	0.0006	-
Example 12	7.0	0.23	0.8	2.1	2.0	-	0.01	0.002	0.0005	0.0005	-
Example 13	7.3	0.24	-	3.1	0.7	-	0.01	0.003	0.0006	0.0005	0.0004
Example 14	7.1	0.21	0.7	3.0	1.9	-	0.01	0.002	0.0005	0.0005	-
Comparative Example 1	8.9	0.23	0.74	-	-	-	0.01	0.002	0.0007	0.0009	0.0009
Comparative Example 2	4.3	0.29	0.01	2.4% RE	-	-	0.01	0.002	0.0008	0.0008	0.0008
Comparative Example 3	4.1	0.34	-	1.5	-	0.10	0.01	0.002	0.0005	0.0007	0.0009
Comparative Example 4	5.5	0.31	-	2.7	-	0.15	0.01	0.003	0.0006	0.0008	0.0008
Comparative Example 5	7.9	0.24	0.7	2.2	1.0	-	0.01	0.003	0.0008	0.0007	-

Table A4

As shown in Table A4, Examples 7 and 10 of EP '531 disclose Al, Mn, Ca, Sr contents and Ca/Al ratio that may overlap those of claim 1. However, Sn is present in Examples 7 and 10 as an essential element for improving castability of the alloy in accordance with EP '531.

In contrast, claim 1 of the present application excludes the presence of Sn, which is not necessary in the present invention, in which "it is possible to simultaneously achieve an improvement of the high temperature strength and castability, which are the main effect of high Al, and an improvement of the creep resistance, which is the main effect of the high Ca, without causing either a drop in the creep resistance due to the higher Al or casting cracks due to the higher Ca."

Because the recited alloy of amended claim 1 excludes Sn, which is an indispensable alloying element of EP '531, the teachings of EP '531 do not render the features of claim 1 obvious to one of ordinary skill in the art.

For at least these reasons, claims 1, 3, 5 and 9 are patentable over EP '531.

3. EP '743

The die castable, creep-resistant magnesium alloys of EP '743 developed for high-temperature structural applications such as automotive engines and transmission cases fails to teach or suggest the claimed composition recited in claim 1. The alloys disclosed in EP '743 fail to satisfy every limitation of claim 1 as shown below in Tables A5-A7. Tables A5 and A6 correspond to Tables 1A and 1B, respectively, in EP '743.

Magnesium Alloy Compositions (weight percent)					
Alloy	Designation	Chemical Composition (wt.%)			
		Al	Ca	Si	Sr
A	AM50	4.7	-	-	-
B	AC52	4.5	1.9	-	-
C	AC53	4.5	3.0	-	-
D	AC53+0.3%Si	4.5	2.9	0.26	-
E	AC53+0.3%Si+0.1%Sr	5.0	2.9	0.27	0.11
F	AC53+0.3%Si+0.15%Sr	5.7	3.0	0.28	0.15
G	AC53+0.03%Sr	4.7	3.1	-	0.03
H	AC53+0.07%Sr	5.0	3.1	-	0.07

Magnesium Alloy Compositions (weight percent)					
Alloy	Designation	Chemical Composition (wt.%)			
		Al	Ca	Si	Sr
I	AC53+0.15%Sr	5.7	3.1	-	0.15
K	AC52+0.1Sr	4.5	1.9	-	0.1
L	AC62+0.2Sr	6.0	2.1	-	0.2
Melting and alloying was done with SF_6 cover gas.					

Table A5

Magnesium Alloy Compositions (wt.%) Used in Castability Study							
Alloy	Al	Ca	Sr	Mn	Fe	Ni	Cu
*AM50	4.4	<0.01	<0.0005	0.25	<0.002	<0.002	<0.003
*AC51	4.6	0.87	<0.0005	0.28	0.002	<0.002	<0.003
*AC52	4.5	1.7	0.0006	0.30	0.002	<0.002	<0.003
*AC53	4.4	2.6	0.0008	0.30	0.002	<0.002	<0.003
*AC53 +0.1Sr	5.2	2.6	0.09	0.29	0.004	<0.002	<0.003
*AC63 + 0.2Sr	5.9	2.5	0.17	0.29	0.005	<0.002	<0.003
These compositions (alloys identified by the * in front of each alloy to distinguish them from the alloys in Table 1A) were alloyed in the melt, as before. The notebook computer case was designed for aluminum but somewhat modified to cast AZ91D. Without further changing the part design or that of the gate and runner system in the die, cases were cast from alloys at a melt temperature of between 1250°F (677°C) and 1290°F (699°C).							

Table A6

Alloy L in Table 1A of EP '743 does not contain Mn, which is included in amended claim 1 as an essential element for ensuring improved corrosion resistance. Alloys AC53+0.1Sr and AC63+0.2Sr in Table 1B fail to have Al contents that satisfy the Al content range as recited in claim 1.

EP '743 thus fails to teach any composition satisfying claim 1, and fails to provide any teachings directing one of ordinary skill in the art to the claimed composition. Because these features of independent claim 1 are not taught or suggested by EP '743, the teachings of EP '743 do not render the features of claim 1 obvious to one of ordinary skill in the art.

Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

C. EP '950 or JP '348

Claims 1, 3-5, 7, 9 and 10 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over EP 1127950 (EP '950) or JP 06-200348 (JP '348). This rejection is respectfully traversed.

1. EP '950

The Patent Office alleges that (1) Ca over 2 wt.% and Al over 6 wt.% as recited in claim 1 reads on Ca of 2 wt.% and Al of 6 wt.% as taught by EP '950 and (2) the alloy of EP '950 having Ca of 2 wt.% and Al over 6 wt.% has a Ca/Al ratio of 0.3333 which also meets the Ca/Al ratio recited in claim 1. Applicants respectfully disagree.

The die casting magnesium alloy of EP '950 that has excellent heat resistance and castability fails to teach or suggest the claimed composition recited in claim 1.

As shown below in Tables A7 and A8, all of the disclosed Examples in EP '950 have Al contents that are less than the Al content range required in claim 1. Tables A7 and A8 correspond to Tables 1 and 2, respectively, in EP '950.

	Composition of alloy (% by weight)							
	Al	Ca	Sr	Mn	Si	Zn	Rare earth elements	Mg
Embodiment 1	3.0	1.0	0.1	0.3	-	-	-	balance
Embodiment 2	4.0	1.0	0.1	0.3	-	-	-	balance
Embodiment 3	5.0	1.0	0.1	0.5	-	-	-	balance
Embodiment 4	5.0	0.5	0.2	0.3	-	-	-	balance
Embodiment 5	5.0	1.5	0.3	0.3	-	-	-	balance
Embodiment 5	5.0	1.0	0.1	0.2	-	-	-	balance
Embodiment 7	5.0	1.5	0.2	0.1	-	-	-	balance
Embodiment 8	5.5	1.0	0.1	0.4	-	-	-	balance
Embodiment 9	5.0	1.0	0.1	0.3	0.6	-	-	balance
Embodiment 10	5.0	1.0	0.1	0.3	-	0.6	-	balance
Embodiment 11	3.0	0.3	0.1	0.3	-	-	-	balance
Embodiment 12	3.0	2.0	0.1	0.3	-	-	-	balance
Embodiment 13	5.0	0.3	0.1	0.3	0.6	-	-	balance
Embodiment 14	5.0	0.3	0.1	0.3	-	0.6	-	balance
Embodiment 15	5.0	2.8	0.1	0.3	0.6	-	-	balance
Embodiment 16	5.0	2.0	0.1	0.3	-	0.6	-	balance
Embodiment 17	5.0	1.0	0.1	0.3	0.2	0.4	0.2	balance
Embodiment 18	5.0	1.5	0.2	0.3	-	-	1.0	balance
Embodiment 19	5.0	1.5	0.2	0.3	-	-	2.5	balance
Embodiment 20	5.0	1.5	0.2	0.3	0.2	-	0.1	balance
Embodiment 21	5.0	1.5	0.2	0.3	0.2	-	2.8	balance
Embodiment 22	5.0	1.5	0.2	0.3	0.2	0.4	0.1	balance
Embodiment 23	5.0	1.5	0.2	0.3	0.2	0.4	2.9	balance
Embodiment 24	5.0	0.8	0.6	0.3	-	-	-	balance
Embodiment 25	5.0	0.8	0.8	0.3	-	-	-	balance
Embodiment 26	5.9	0.5	0.1	0.3	-	-	1.0	balance
Embodiment 27	5.0	2.0	0.1	0.5	-	-	1.5	balance
Embodiment 28	5.0	1.5	0.8	0.3	-	-	1.0	balance
Embodiment 29	5.0	1.5	1.0	0.3	-	-	-	balance
Embodiment 30	5.0	1.5	0.2	0.2	-	-	1.4	balance
Embodiment 31	5.0	1.4	0.1	0.2	-	-	1.9	balance
Embodiment 32	5.0	1.5	0.4	0.4	-	-	-	balance
Embodiment 33	4.2	1.0	0.4	0.2	-	-	1.0	balance

Table A7

	Composition of alloy (% by weight)							
	Al	Ca	Sr	Mn	Si	Zn	Rare earth elements	Mg
Comp. Embodiment 1	*1.0	1.5	0.1	0.3	-	-	-	balance
Comp. Embodiment 2	*7.0	1.5	0.1	0.3	-	-	-	balance
Comp. Embodiment 3	5.0	*0.1	0.1	0.3	-	-	-	balance
Comp. Embodiment 4	5.0	2.5	0.1	0.3	-	-	-	balance
Comp. Embodiment 5	5.0	1.0	*-	0.1	-	-	-	balance
Comp. Embodiment 6	5.0	1.5	0.1	*1.2	-	-	-	balance
Test Embodiment 1	5.0	1.5	0.2	-	-	-	0.04	balance
Comp. Embodiment 7	5.0	1.5	0.2	-	-	-	*3.7	balance
Test Embodiment 2	5.0	1.5	0.2	0.3	-	-	0.03	balance
Comp. Embodiment 8	5.0	1.5	0.2	0.3	-	-	*3.5	balance
Test Embodiment 3	5.0	1.5	0.2	0.3	0.2	-	0.04	balance
Comp. Embodiment 9	5.0	1.5	0.2	0.3	0.2	-	*3.7	balance
Test Embodiment 4	5.0	1.5	0.2	0.3	0.2	0.4	0.03	balance
Comp. Embodiment 10	5.0	1.5	0.2	0.3	0.2	0.4	*3.6	balance
Comp. Embodiment 11	*6.5	0.5	0.1	0.3	-	-	-	balance
Test Embodiment 5	5.0	1.5	1.2	0.3	-	-	-	balance
Comp. Embodiment 12	5.0	1.5	*0.004	0.3	-	-	-	balance
Comp. Embodiment 13	5.0	*0.1	0.1	0.3	0.6	-	-	balance
Test. Embodiment 6	5.0	1.0	1.2	0.3	0.6	-	-	balance
Comp. Embodiment 14	5.0	1.0	*0.004	0.3	-	0.6	-	balance

Table A8

Comparative Examples 2, 3 and 11 of EP '950 have Al contents within the recited Al content range of claim 1, but fail to have Ca content values or the Ca/Al ratio values within the recited Ca content range or Ca/Al ratio range as required in claim 1 (see Table A8). Thus, EP '950 fails to teach or suggest an alloy having an Al content over 6 wt.% to not more than

10 wt.%, a Ca content over 2 wt.% to not more than 5 wt.%, and a Ca/Al ratio of 0.3 to not more than 0.5 as recited in claim 1.

EP' 950 thus fails to teach any composition satisfying claim 1, and fails to provide any teachings directing one of ordinary skill in the art to the claimed composition. Because the features of independent claim 1 are not taught or suggested by EP '950, the teachings of EP '950 do not render the features of claim 1 obvious to one of ordinary skill in the art. For at least these reasons, claims 1, 3-5, 7, 9 and 10 are patentable over EP '950.

2. JP '348

The general purpose heat resistant lightweight magnesium alloy of JP '348 fails to teach or suggest the claimed composition recited in claim 1.

As shown below in Table A9, Examples 1-13 of JP '348 fail to teach or suggest an alloy having a Ca content over 2% to not more than 5% by weight and an Al content over 6% to not more than 10% as required in claim 1. Table A9 corresponds to Table 1 of JP '348.

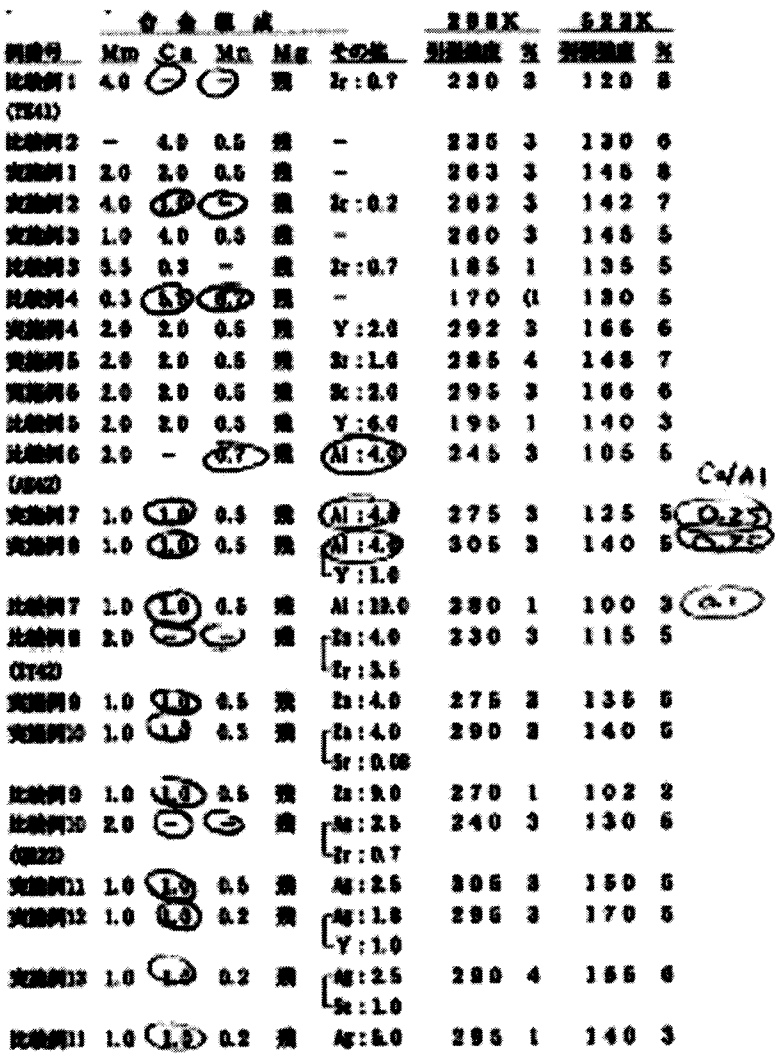

Table A9

Examples 7 and 8 and Comparative Example 7 of JP '348 contain both Al and Ca (see Table A9). However, Examples 7 and 8 have Al and Ca contents outside the recited Al and Ca contents as required in claim 1. Comparative Example 7 has an Al content that overlaps the recited Al content in claim 1, but has a Ca content that is less than the recited Ca content in claim 1. Additionally, Examples 7 and 8 and Comparative Example 7 have Ca/Al ratios that are less than the recited Ca/Al ratio as required in claim 1.

Thus, JP '348 fails to teach or suggest an alloy that satisfies the recited contents of Al and Ca and the recited Ca/Al ratio of claim 1.

JP '348 thus fails to teach any composition satisfying claim 1, and fails to provide any teachings directing one of ordinary skill in the art to the claims composition. Because the features of independent claim 1 are not taught or suggested by JP '348, the teachings of JP '348 do not render the features of claim 1 obvious to one of ordinary skill in the art.

Accordingly, reconsideration and withdrawal of these rejections are respectfully requested.

III. New Claims

As discussed above with respect to claim 1, none of the cited references, taken singly or in combination, teaches or suggests a heat resistant magnesium die casting alloy consisting of (1) an Al content over 6 wt.% to not more than 10 wt.%, (2) a Ca content over 2 wt.% to not more than 5 wt.% (claim 4) or a Ca content over 2.5 wt.% to not more than 3.5 wt.% (claim 7), (3) a Ca/Al ratio of the Ca content to the Al content being 0.3 to 0.5, (4) a Sr content over 0.05 wt.% to not more than 1.0 wt.%, (5) a Mn content over 0.1 wt.% to not more than 0.6 wt.%, (6) a rare earth metal content over 0.1 wt.% to not more than 3 wt.%, and (7) a balance of alloy having Mg and unavoidable impurities, as recited in new claims 11 and 12.

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1, 3-5, 7 and 9-12 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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Registration No. 48,641

JAO:BCA/hs

Date: November 26, 2006

OLIFF & BERRIDGE, PLC
P.O. Box 320850
Alexandria, Virginia 22320-4850
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION
Please grant any extension necessary for entry;
Charge any fee due to our Deposit Account No. 15-0461